Dear Xiaofeng Wang and other authors of the article:

An Improved Low Phase Noise LC-VCO with Wide Frequency Tuning Range Used in CPPLL

Your equation (3) in the latest revision of your article:

$$L\{\Delta\omega\}=10\cdot\log\left[\frac{c_o^2}{(CV_{max})^2}\cdot\frac{k\,T}{2\,R_P\cdot\Delta\omega^2}\cdot\frac{\omega_{1/f}}{\Delta\omega}\right]+10\cdot\log\left[\frac{1}{2}\cdot\frac{k\,T}{V_{max}^2}\cdot\frac{1}{R_P(C\,\omega_0)^2}\cdot\left(\frac{\omega_0}{\Delta\omega}\right)^2\right]$$

can be rewritten using the following law of logarithms:

$$10\cdot\log(A)+10\cdot\log(B)=10\cdot\log(A\cdot B)$$

into the following form:

$$L\{\Delta\omega\}=10\cdot\log\left[\frac{c_o^2}{(CV_{max})^2}\cdot\frac{k\,T}{2\,R_P\cdot\Delta\omega^2}\cdot\frac{\omega_{1/f}}{\Delta\omega}\cdot\frac{1}{2}\cdot\frac{k\,T}{V_{max}^2}\cdot\frac{1}{R_P(C\,\omega_0)^2}\cdot\left(\frac{\omega_0}{\Delta\omega}\right)^2\right]=10\cdot\log\left[\frac{something}{(\Delta\omega)^5}\right]$$

Something that decays proportional to $(\Delta\omega)^{-5}$ can not represent the phase noise of any real world oscillator. Further the above formula does not correspond to the text of your article. Finally, critically important parameters of your semiconductor process like the corner frequency $\omega_{1/f}$ are not specified.

We suggest to correct the formula or to completely omit the discussion about phase noise. Else we can not publish your article.